

USAWC STRATEGY RESEARCH PROJECT

**EDUCATION: A JOINT TRANSFORMATION ENABLER**

by

Lt Col Renita D. Alexander  
USAF

Dr. Clayton K. Chun  
Project Advisor

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U.S. Army War College  
CARLISLE BARRACKS, PENNSYLVANIA 17013

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## ABSTRACT

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Since mid-2001, the Department of Defense (DoD) has been actively, even urgently, engaged in a transformation designed to ensure it is postured to meet future security challenges while sustaining U.S. capability to defeat current threats. From a new capabilities-based defense strategy to the restructuring of the Unified Command Structure, the Secretary of Defense Donald Rumsfeld has led the implementation of significant changes in an organization not known for its adaptability. Underlying the pursuit of transformational concepts necessary to respond to 21<sup>st</sup> century challenges is an emphasis on joint operations and doctrine. This emphasis on jointness goes beyond mere service deconfliction or interoperability and mandates more cohesion and continuity to achieve the synergy from joint operations. A joint perspective from the services is crucial to the successful implementation of transformation goals. Unfortunately, a joint perspective within the military departments is currently missing.

Almost since the creation of the Department of Defense (DoD), professional military education has been seen by some as a way to foster jointness. This paper looks at how a reformed education system, by encouraging a joint perspective in the military leadership, can help achieve DoD's transformation goals.



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## EDUCATION: A JOINT TRANSFORMATION ENABLER

We need rapidly deployable, fully integrated joint forces capable of reaching distant theaters quickly and working with our air and sea forces to strike adversaries swiftly, successfully, and with devastating effect.

—Secretary of Defense, Donald Rumsfeld  
31 January 2002<sup>1</sup>

From their arrival in Afghanistan, the Special Forces that helped plan the attack on Mazar-I-Sharif, adapted to their surroundings. They grew beards, wore traditional scarves, and learned to ride horses, just like the anti-Taliban forces they lived and trained with. And when the time came, they teamed with Afghan fighters on the ground and Army, Navy, Air Force, and Marine aircrews armed with precision-guided munitions, to win the battle for Mazar-I-Sharif and set in motion the Taliban's fall from power. According to Secretary of Defense (SecDef) Donald Rumsfeld, "that day on the plains of Afghanistan, the 19<sup>th</sup> century met the 21<sup>st</sup> century" to defeat a dangerous and determined adversary. The joint, coalition force demonstrated that a transformation of the military "is about more than building new high tech weapons...it's also about new ways of thinking, and new ways of fighting."<sup>2</sup>

Since mid-2001, the Department of Defense (DoD) has been actively, even urgently, engaged in a transformation designed to ensure it is postured to meet future security challenges while sustaining U.S. capability to defeat current threats. Although much energy has been expended on the development of advanced technical capabilities, as the example above demonstrates, transformation is not just about technology. From a new capabilities-based defense strategy that focuses on the "why" and "how" instead of the "who" and "where"<sup>3</sup> to the restructuring of the Unified Command Structure, Donald Rumsfeld has led the implementation of significant changes in a organization not known for its adaptability by focusing on "the 21<sup>st</sup> century need."<sup>4</sup> Underlying the pursuit of new transformational operational concepts necessary to respond to 21<sup>st</sup> century challenges is an emphasis on the need for joint operations and doctrine.

This emphasis on jointness goes beyond interoperability and mandates more cohesion and continuity to achieve the synergy from joint operations.<sup>5</sup> Even as the ongoing war on terrorism offered examples of the services' achieving that synergy by working together, it also demonstrated what could happen when they do not. A few months after Mazar-I-Sharif, the loss of seven U.S. service members and wounding of dozens more during Operation ANACONDA, led to friction between the Army and Air Force as accusations and counter accusations flew

over the performance of each during that operation. The Army leader who planned and executed the operation took issue with the Air Force's over-reliance on precision-guided bombs and complained that the Air Force "allowed enemy targets to escape destruction and deprived soldiers under fire of badly needed close air support."<sup>6</sup> In response, Air Force leadership indicated that the airmen responsible for orchestrating air power in theater were not told of the operation until days before it was launched, leaving them little time to coordinate the details of aircraft participation. The Army leadership stated the Air Force's Air Tasking Order process for scheduling aircraft is too inflexible; Air Force officers suggested the Army leaders did not understand how airpower works in a theater of operations.<sup>7</sup> While more than one senior leader has acknowledged to Army War College audiences enough fault to go around, the growing tension prompted at least one Air Force leader to address the issue in writing. In December 2002, the Air Force's Air Combat Command website featured a plea from its commander, General Hal Hornburg, to "avoid allowing any inter-service wedges to take hold" during the review of Operation ANACONDA.<sup>8</sup> The investigation is ongoing; the inter-service bickering continues.

The Operation ANACONDA debate is just the latest example of how the services' perceptions of themselves and sister services and their individual attitudes toward members of services other than their own can contribute to the fog and friction during and even after war. Is a transformation so dependent on joint operations possible in the current DoD environment? Or will the parochial behavior and inter-service rivalry that has characterized much of the interaction between the military departments for decades thwart the latest attempt to change the DoD? Perhaps a joint transformation can only be achieved by abandoning the current structure. At the very least, education about and exposure to all the elements of military power at an earlier juncture in professional military education would go a long way in overcoming the organization influences that sometimes affect strategic decision making.

This paper will focus on the key role of education in the achievement of DoD's transformation goals. It begins with the Bush administration's definition of transformation, why the administration feels transformation is crucial, and why transformation can not be achieved unless the military departments are acting jointly. This assessment of the crucial role jointness plays in the military's transformation effort is followed by a look at the cultural impediments to jointness. The next section reviews the transformation "roadmaps" to assess the success of the military departments in overcoming cultural barriers and abandoning bureaucratic interests to effectively exploit joint warfighting capabilities. The paper then provides an overview of the evolution of joint education in DoD from 1946 to the present and offers recommendations on

how joint education can be transformed now to ensure attainment of the DoD's overarching transformation objectives.

## **TRANSFORMATION: WHAT**

Transformation, revolution in military affairs (RMA), and military revolution have been key topics in U.S. post-Cold War security debate and defense planning efforts.<sup>9</sup> Some authors use the concepts interchangeably to describe aspects of change, others make distinctions between the three or identify one concept as a subset of another and still others disagree on whether transformational changes occurring in the military are really revolutionary, or if technological innovations render existing military structures more effective or obsolete.<sup>10</sup>

The various definitions of transformation also affect the historical perspective. At the extreme is the suggestion that a true military transformation occurs only when a changed society forces its military to change at every level simultaneously, transforming the relationship of the military to the economy and society.<sup>11</sup> By this measure, military transformations have occurred only twice, in conjunction with the Agricultural and Industrial revolutions, with a third, information-driven transformation underway.

Transformation refers to the set of activities by which DoD attempts to harness the revolution in military affairs to make fundamental changes in technology, operational concepts and doctrine, and organizational structure.<sup>12</sup> Transformation is an ongoing process...the result of "exploitation of new approaches to operational concepts and capabilities, the use of old and new technologies, and new forms of organization that more effectively anticipate new or still emerging strategic and operational challenges and opportunities and that render previous methods of conducting war obsolete or subordinate."<sup>13</sup>

## **TRANSFORMATION: WHY CHANGE**

Led by Secretary Rumsfeld, the Bush administration has made a convincing case for transformation, citing changes in the threat environment as well as the opportunity provided by technological advances as factors that compel transformation. The United States military complex enjoys superiority by every measurable indicator and advances in technology have only enhanced its capability to conduct operations across the spectrum of military operations. However, the increase in strategic actors capable of threatening U.S. security interests, the adoption of indirect or asymmetric methods to attack U.S. interests at home or abroad, and the proliferation of a variety of destructive capabilities are trends that characterize significant new challenges in the threat environment which make current indicators less relevant.<sup>14</sup> The 2001

Quadrennial Defense Review (QDR) acknowledged the fluidity and uncertainty of the current security environment that defies predictability, however, identified the following geopolitical trends that may give rise to new threats.

- Diminishing protection from direct attack afforded by the geographic distance of the U.S. as demonstrated by the attacks of September 11, 2001.
- Increasing threats to stability in regions critical to U.S. interests.
- Increasing challenges and threats emanating from the territories of weak and failing states.
- Diffusion of power, resources, and military capabilities to non-state actors.
- Importance of developing and sustaining regional security arrangements.
- Increasing diversity in the sources and unpredictability of the locations of conflict.<sup>15</sup>

Technological advances, which have been key contributors to U.S. military superiority, are also driving transformation. Precision guided munitions combine enhanced accuracy, range, striking power and portability to increase the lethality of weapons launched over greater distances. Low observability to enemy radar and infrared sensors or stealth technology, has greatly reduced the effectiveness of existing early-warning and engagement radar, allowing the unobserved penetration of enemy airspace by an approaching aircraft. Intelligence, surveillance, and reconnaissance improvements provide information that can potentially reduce the “fog of war” by providing commanders complete, real-time knowledge of events going on in a particular battlespace. The administration acknowledges, however, the military-technical advances it hopes the U.S. will exploit are readily available on the global marketplace and could also enhance the capabilities of would-be adversaries. The 2001 QDR identified the following military-technological trends that affect U.S. defense strategy.

- Increasing availability of off-the-shelf technology to enhance the capabilities of hostile state/non-state actors.
- Pervasiveness of the proliferation of chemical, biological, radiological, nuclear, and enhanced high explosive weapons with their means of delivery and ballistic missiles.
- Emergence of space and cyberspace as new arenas of military competition.
- Increasing potential for miscalculation.<sup>16</sup>

The Bush administration is convinced the effort to transform now will allow the exploitation of rapidly advancing technologies to deal with existing and nascent threats before they pose a security risk, allowing the U.S to extend its current military superiority.<sup>17</sup> The administration has implemented a number of changes at the macro level. It has revised the Unified Command Plan, adding Northern Command, changing the missions of Special Operations and Joint Forces Commands, merging Space into Strategic Command to make use of the new instruments of strategic power, and assigned previously unassigned geographic areas to a combatant commander's area of responsibility.<sup>18</sup> At the micro level, DoD has taken on the task of creating an overarching concept for the employment of the joint force--a joint operational concept that will begin to frame for the services how they ought to go about their man, train, and equip tasks under Title 10.

### **TRANSFORMATION EQUATES TO JOINTNESS**

Joint is defined by the Department of Defense as "activities, operations, organizations, etc., in which elements of two or more military departments of the same nation participate."<sup>19</sup> Jointness, the condition of being joint, is a central tenant of the transformation effort, however, getting the services to think and operate jointly has been an issue since the 1947 National Security Act. Operations like URGENT FURY, generated to restore the lawful government of Grenada and protect U.S. citizens, and Operation EAGLE CLAW/DESERT ONE, executed to free US hostages held in Iran by militant students, revealed critical shortcomings in the military's ability to effectively assemble and employ appropriate joint capabilities. Congress attempted to remedy the situation with the 1986 DoD Reorganization (Goldwater-Nichols) Act.

The primary objective of the Goldwater-Nichols Act (GNA) was to strengthen combined and joint operations. It included provisions to encourage and even require joint behavior and thinking. Several of the provisions focused on correcting inadequacies in the joint command structure. GNA replaced the Joint Chiefs of Staff (JCS) committee with the Chairman of the Joint Chiefs of Staff (CJCS) as the principal military advisor to the President, National Security Council, and Secretary of Defense; established the position of vice chairman of the JCS; and gave the CJCS control of the Joint Staff. GNA sought to decrease service bias in providing course of action recommendations to the President and SecDef by giving combatant commanders that responsibility.<sup>20</sup>

Joint Vision 2010 (JV 2010) continued the assault against service parochialism by providing a blueprint for the 21st century military operating in concert. JV 2010 established a context in which "requirements were defined in terms of their ability to enhance the capacity to

understand the complexities of combat, communicate, and deliver violence with speed, precision, accuracy and effect over greater distances.<sup>21</sup> The concepts of dominant maneuver, precision engagement, focused logistics and full dimensional protection enabled by the power of technological innovation and information superiority served as the foundation of JV 2010. Joint Vision 2020 (JV 2020) built upon and expanded the concepts of JV 2010, providing guidance for the transformation of America's military to "a force that is dominant across the full spectrum of military operations – persuasive in peace, decisive in war, preeminent in any form of conflict."<sup>22</sup>

In the 2001 QDR and draft National Military Strategy, DoD continued the emphasis on jointness by identifying the need to strengthen joint operations and organizations and experiment with new concepts of operation as key to the department's culture of continual transformation.<sup>23</sup> Command and control will remain the primary integrating and coordinating function of operational capabilities for service components for the joint force of the future.<sup>24</sup> The development of effective joint command and control for future operations requires rigorous and wide-ranging experimentation, focused especially on organizational innovation and doctrinal change.<sup>25</sup> Unfortunately, the perspective of those who would develop the appropriate structure and doctrine, to include general and flag officers, is colored by service culture.

#### **IMPACT OF SERVICE CULTURE ON JOINTNESS**

Despite public acceptance of the joint concepts inherent in DoD's transformation plan, each of the services has pursued transformation in a way that highlights its own capabilities with little regard for how these capabilities will be used to accomplish the mission. However, this should not be surprising.

We term commitment to a single military service's interests either "parochialism" or "service loyalty," depending on the connotation we are trying to impart. But regardless of what one calls it, it involves a narrowing of perspective. Parochialism is more than a belief in the superiority of one's own service. It is also the presumption that expanding the capabilities of one's "superior" service—regardless of the loss of capabilities and resources by another military service—advances the interests of the nation.<sup>26</sup>

There are "profound, pervasive and persistent" cultural and institutional differences that give the services unique organizational personalities.<sup>27</sup> As the late author Carl H. Builder suggests in his book *The Masks of War*, it is organizational personality differences rather than any threat to national interests that dictate the way the Services approach strategy, the types of forces they prefer, and the way they see warfare. According to Builder, the institutions that wield the most power in the U.S. national security arena, the institutions that determine how the

majority of defense dollars are spent, are often incapable of getting past their cultural and institutional preferences to serve the larger interests of the nation.<sup>28</sup> Goldwater-Nichols sought to reduce parochialism and rivalry and increase cooperation among the services; however, it has been only partially successful as evidenced during several recent operations.<sup>29</sup> Army planners for Operations DESERT SHIELD/DESERT STORM railed against the “embryonic Operation Instant Thunder strategic air campaign” that became the basis for the air operation, instead favoring land-centric alternatives.<sup>30</sup> During Operation ALLIED FORCE, it became clear that General Wesley Clark, the Supreme Allied Commander in Europe, and his air component commander, Air Force Lieutenant General Michael Short were divided over the most appropriate targeting strategy. Short wanted to concentrate on centers of gravity in and around Belgrade; Clark, as was his command prerogative, insisted on targeting elusive enemy ground forces in Kosovo.<sup>31</sup> These instances demonstrate that legislation alone can not overcome the entrenched organizational prejudice that can influence military decision makers. The transformation plans adopted by each of the services is further evidence that without a joint perspective, even those serving in joint assignments have a difficult time developing realistic concepts of how emerging technologies might be developed jointly for use in future wars.<sup>32</sup>

#### **DOD TRANSFORMATION PLANS**

The U.S. Joint Forces Command's (USJFCOM) fundamental mission is to facilitate the “deliberate, well-planned approach to transformation.”<sup>33</sup> Along with the Military Departments, USJFCOM was tasked by the SecDef to create transformation “roadmaps” that demonstrate how they will exploit new technologies, doctrines, and organizational structures to create operational concepts that fully harness joint warfighting capabilities.

The military departments will individually develop the vast majority of changes that effect how the services interact in a joint environment.<sup>34</sup> They were tasked to focus their transformation efforts on achieving six "critical operational goals of transformation" described in the 2001 Quadrennial Defense Review (QDR) and the SecDef's Defense Planning Guidance:

- Protect bases of operation at home and defeat the threat of chemical, biological, radiological, and nuclear effect weapons
- Assure information systems in the face of attack and conduct effective information operations
- Protect and sustain US forces in distant anti-access and area-denial environments



- Deny enemies sanctuary by providing persistent surveillance, tracking and rapid engagement
- Enhance the capability and survivability of space systems
- Leverage information technology and innovative concepts to develop interoperable Joint C4ISR <sup>35</sup>

The service transformation plans identify how each service will adopt new concepts of operations as well as make organizational changes to take advantage of advanced technologies in support of the operational goals identified above. At the core of each plan is the exploitation of information systems to enhance combat operations. Each plan espouses the service's commitment to the principle of jointness. The services recognize the need to create an environment conducive to innovation organizational and cultural changes to effectively implement the transition for those components that will actually change. Most importantly the plans reflect an understanding that transformation is a constant, "that there is no point at which we can declare that U.S forces have been transformed".<sup>36</sup> Yet, each of the plans reflects a belief in the importance of that services' particular war-fighting specialty to the nation's defense

#### THE DEPARTMENT OF THE ARMY TRANSFORMATION ROADMAP

The Army was the first military department to outline its plan to meet the challenges of a new strategic environment. Its 1999 vision, "Soldiers on Point for the Nation...Persuasive in Peace, Invincible in War," provided the Army's "concept for transforming the most respected Army in the world into a strategically responsive force that is dominant across the full spectrum of operations."<sup>37</sup> The Army's transformation effort is focused on creating a versatile, modular, responsive, rapidly deployable, fully interoperable, tactically agile, yet lethal Objective Force which will provide the Joint Force Commander (JFC) the ability to "seize the initiative and maintain operational momentum once engaged."<sup>38</sup>

At the center of the Objective Force will be the Future Combat Systems (FCS). The FCS is envisioned to be an ensemble of manned and unmanned ground combat systems, unmanned aerial vehicles, distributed, unattended sensors and a range of fire systems. The FCS will be a multi-functional, multi-mission re-configurable system of systems to maximize joint interoperability, strategic transportability and commonality of mission roles including direct and indirect fire, air defense, reconnaissance, and troop transport. The goal of this effort is to develop a network centric advanced force structure, designed to ensure that the Objective Force is strategically responsive. The FCS force will incorporate and exploit information

dominance to develop a common, relevant operating picture and achieve battlespace situational understanding.<sup>39</sup>

The Army's efforts to be strategically responsive in a wide spectrum of operations reflect the Army's desire to be the decisive factor in a strategy that calls for a flexible DoD. But a force that is too slow to the fight can not be the deciding factor. So, the Army's plan advertised the deployment of a combat capable brigade in 96 hours, a full division in 120 hours, and 5 divisions within 30 days. However, the Army leadership neglected to work with U.S. Transportation Command on the specifics of how the Army, traditionally transported by sea, would actually get to any theater in the prescribed time. Additionally, the 2-piece, 100-plus ton Crusader, originally a vital part of the plan, could not be transported intact by either of the two largest military cargo planes.<sup>40</sup> Sec Rumsfeld took care of the problem of lifting the Crusader when he cancelled the system because it was "too heavy to deploy to distant battlefields and not 'transformational' enough to be relevant on the future battlefield."<sup>41</sup>

The issue of the Crusader is instructive in that it demonstrates how the Army's institutional view of itself as the defender of Central Europe has withstood the disintegration of the Warsaw Pact as well as the day to day noncombat reality of most Army activities to continue to influence the Army's force structure. A war in Central Europe would require the Army's preferred "balance of infantry, armor, artillery, aviation, and air defense that would best match the balance of internal institutional interests of the Army" and be "a reprise of the war that the Army remembers most positively about itself and its performance."<sup>42</sup>

#### THE DEPARTMENT OF THE AIR FORCE TRANSFORMATION FLIGHT PLAN

The Air Force's transformation efforts focus on the development of capabilities-focused, effects-based force presentation Task Force Concept of Operations (CONOPS). These Task Force CONOPS describe how Air and Space Power can be used to produce warfighting effects that counter the "strategies and capabilities U.S. forces may encounter" in the future. The Task Force CONOPS guide the planning, programming, requirements, and acquisition of capabilities required to meet current as well as future needs. The overarching concept that describes how the Air Force will present combat-ready forces to combatant commanders is the Air and Space Expeditionary Forces Concept of Operations (AEF CONOPS). The AEF CONOPS provide the JFC with a fully capable, rapidly deployable, global force able to capitalize on improved stealth, speed, standoff and precision to rapidly gain aerospace superiority and dominate the battlespace.<sup>43</sup>

The Air Force's concept of war is influenced by its fight for recognition as a decisive instrument of war which in its quest for independence, often led to an overemphasis of the efficacy of airpower.<sup>44</sup> The bomber generals who led the Air Force for its first 30 years were absolutist in their belief in the strategic capability of airpower, specifically strategic bombing, "to not only win wars but to end them."<sup>45</sup> Whether controlled by the bomber or fighter pilot community, the Air Force has resisted any efforts to undermine its hard fought autonomy or to suggest airpower is subservient to the other services in any way. This attitude is manifested in its transformation plan's focus on its strategic capabilities, which, according to some critics, is at the expense of its reconnaissance, close air support, and airlift missions.

#### THE DEPARTMENT OF THE NAVY TRANSFORMATION ROADMAP

The Navy's plan revolves around the interdependent, synergistic transformational concepts of Sea Strike, Sea Shield, and Sea Basing enabled by FORCEnet, the next generation of Network Centric Warfare to achieve "a networked, sea-based power projection force which will enable joint force operations and assure access throughout the world."<sup>46</sup> Expeditionary Maneuver Warfare provides a framework for the development of capabilities that capitalize on concepts such as Ship-to-Objective Maneuver to ensure the Marines continue to provide the JFC with the unmatched capabilities of a single, integrated, combined arms force.<sup>47</sup>

#### IMPACT OF PROFESSIONAL MILITARY EDUCATION SYSTEM ON JOINTNESS

Professional military education has been seen as a way to foster jointness at least since World War II. Before the war, American scholarship in the profession of arms matured in each of the military services more or less independently. Educational requirements for leaders of the Nation's land, sea, and air forces were met by postgraduate colleges set up to ensure the development of functional combatant competencies fundamental for employing military capabilities. The need for improved inter-service cooperation in joint combat operations evident during World War II led to the establishment of three colleges within a year of the war's end that would provide the basic structure for Professional Military Education (PME). Because schools "transmit, interpret and share culture," the joint schools would inculcate a culture that fostered joint operations.<sup>48</sup>

The National War College, the Industrial College of the Armed Forces, and the Armed Forces Staff College were envisioned as replacements for the service war colleges even before the National Security acts of 1947 and 1949 created the Department of Defense.<sup>49</sup> However, the idea of eliminating the service schools in favor of unified military schools was not viewed enthusiastically by all the services. The Navy strongly and successfully resisted unification and

the newly independent Air Force, which used the students at its war college to help create basic doctrine, was not interested in any concept that threatened its new autonomy. Ten years after the Army closed its war college due to pre-WW II mobilization and four years after giving its original facilities to the National War College, the Army War College was reopened at a new location, giving Army officers the same opportunity for senior schooling being offered to officers in the Air Force and Navy. Instead of displacing the service schools, the joint schools had evolved as different but equivalent.<sup>50</sup>

The military educational network remained virtually unchanged until 1976 when the DoD Committee on Excellence in Education recommended the establishment of the National Defense University (NDU). NDU was tasked to oversee the National War College and Industrial College of the Armed Forces, eliminating administrative and logistical redundancies and allowing the leadership at each school to devote its full attention to education and academic leadership. In 1981, the Armed Forces Staff College became a component college of NDU.<sup>51</sup>

Then, as previously mentioned, the 1986 Goldwater-Nichols Act was enacted. GNA's emphasis on jointness included an emphasis on joint education. The education-related provisions of GNA called for improvements to the programs of the joint colleges and the inclusion of substantial units of joint subject matter in the curricula of the intermediate and senior service schools. It also established the Joint Specialty Officer (JSO) category, and the requirement for all general or flag officers to have served in a joint duty assignment before advancement to a senior leadership position, and "mandated new procedures for the selection, education and assignment of joint duty officers."<sup>52</sup>

The bill's authors claimed triumphantly that Goldwater-Nichols fulfilled "the aims of President Eisenhower, who said almost three decades ago, 'Separate ground, sea, and air warfare are gone forever.... Strategic and tactical planning must be completely unified, combat forces organized into unified commands...'"<sup>53</sup> However, in the year following its enactment, the House Armed Services Committee (HASC) felt that DoD had failed to adequately implement the GNA provisions with respect to PME. Consequently, in November 1987, the HASC established the Panel on Military Education, chaired by Representative Ike Skelton (D-MO), to make recommendations on how best to implement the provisions of GNA. Included was the recommendation for establishment of a two-phased JSO education program. Phase I would be taught in intermediate and senior-level service colleges for all students and Phase II in a follow-on, three month course for officers enroute to a joint assignment. The panel also recommended a consistent framework for PME that related levels of warfare to levels of PME. The intermediate schools would focus on the operational level of war and the senior service schools

would focus on national military strategy.<sup>54</sup> Additionally the Skelton panel recommended goals for the faculty and student mix at the joint and service schools.

As the military “czar” of all joint education, the Chairman, Joint Chiefs of Staff (CJCS) was given the responsibility for establishing policies, programs, guidelines, and procedures for coordinating Joint Professional Military Education (JPME) in keeping with the directives of the GNA and the Skelton panel.<sup>55</sup> The CJCS established the position of Director of Military Education, responsible for developing Officer Professional Military Education Policy (OPMEP) which codified the framework for PME, established joint curricula, academic standards, and goals for faculty and student mixes. The CJCS implemented most of the recommendations from the Skelton panel however, significant differences in the services’ approach to education continue to undermine the effectiveness of the service schools in encouraging a joint perspective.<sup>56</sup> In fact, a survey of Army, Air Force and Navy war college students conducted in 1998 suggested the education reforms undertaken as a result of GNA may not have reduced service-based parochialism. The survey, developed and administered by an Army War College student, and designed to measure joint attitudes and organizational biases discovered a significant polarization of viewpoints among students based on service orientation. Significantly, however, the over three hundred students attending the “joint” senior schools of the National Defense University (NDU) were included in the survey population but not actually surveyed.<sup>57</sup>

## SERVICE SCHOOLS

Officer professional development is primarily a service responsibility. Each of the service schools focuses on employing combat forces at three levels of warfare: tactical, operational, and strategic. Format is also similar; at the senior level, the war colleges are structured around seminars to emphasize active learning. The schools employ case-studies, extensive student reading, written and oral presentations, classroom analysis, field trips, as well as lectures by faculty members and prominent outside authorities to facilitate an adult-learning environment. During the courses, students are required to write analytic essays, deliver oral presentations, and participate in group exercises. This concentration of seminar discussion, analytic writing, oral presentations, and exercises stresses active learning and the application of principles and concepts developed during the academic program. Each of the schools uses information technologies in teaching, analysis and decision making.

The services have embedded in their PME systems a program of JPME designed to fulfill the educational requirements for joint officer management as mandated by the 1986 GNA. At the intermediate level, this includes the study of joint operations from the perspective of service

forces in a joint force supported by service components. At the senior level, the service schools focus on “how the unified commanders, Joint Staff and DoD use the instruments of national power to develop and carry out national military strategy.”<sup>58</sup> The core curriculum at each of the service schools incorporates the Program of Joint Education (PJE) and consists of interrelated courses presented in a balanced mix of seminars, lectures and field studies.

## **Army**

The Army is transforming its Officer Education System (OES) to educate the leaders who will command and control its Objective Force. Recently approved changes include Intermediate Level Education (ILE) that provides three months of operational common-core Military Education Level (MEL) 4/JPME 1 qualification instruction to all majors, and additional education opportunities that are tied to the officer’s specific career field, branch, or functional area for selected officers. Upon full implementation of the ILE in the fourth quarter, FY 05, the three-month ILE common core curriculum will be delivered in residence at Fort Leavenworth or at distance education campus sites.<sup>59</sup>

Although there are no immediate plans to similarly restructure the Army’s senior-level school, the U.S. Army War College has already undergone changes as a result of the accreditation process. Although, the Army War College has not adapted as rigorous a grading system as the one found at the Naval War College, the school has increased the requirements for graduation. The “core” courses build on basic concepts by using historical lessons and current events to encourage critical thinking as students discuss increasingly complex issues. The Strategic Leadership course is designed to help the student think, operate, and act within the strategic environment through an examination of responsible leadership and management practices. In War, National Policy, and Strategy, students study the theory of war and the development of a national security strategy, to develop an appreciation of U.S. national interests and the political and social goals which affect relationships among nations. Based on their own theories of warfare, students develop and implement a national military strategy.

Joint Processes and Landpower Development, examines how the Army is designed and resourced and presented to the Combatant commander. Although the course also examines other DoD organizations, issues and processes, as well as military assistance to civil authorities, the focus is clearly on the Army. This course builds on earlier courses and requires students to analyze, evaluate, and formulate resourcing and force structure decisions.

Implementing National Military Strategy focuses on educating officers to translate National Military Strategy into near and mid-term plans and programs. Students are exposed to

the Unified Command Plan, theater strategic planning, campaign planning through the range of military operations, joint, multinational and interagency plans and operations, joint service support to unified commanders in war and military operations other than war, organizing, training, and sustaining joint task forces, and joint and service-unique doctrine.<sup>60</sup>

### **Air Force**

Like the Army, Air Force officer education is undergoing changes, especially at the intermediate level. The Force Development construct is designed to create an officer corps with the necessary skills to satisfy institutional requirements for the 21st century. Officers promoted to major will be required to take at least the basic, core leadership module of PME. Key to the concept is the creation of officer development teams for each career field that will provide feedback to the officer and his/her chain of command on the need for additional education. These teams of senior officers from each career field will help determine who needs to have an Advanced Academic Degree (AAD) and the Air Force will send officers selected to get a degree that is useful to the individual and the Air Force, either as part of PME or AAD. At this point, the focus is on the transition from tactical development to operational development; however, formulation of strategic level leaders is also being evaluated so the Air Forces senior-level school may be affected by the Force Development concept.<sup>61</sup>

As a part of the Air Force's military education center, Air University, the Air War College is devoted to teaching senior military and civilian government leaders about leadership, national strategy, the international security environment, and the deployment and employment of air and space power in a joint context. The Air War College core curriculum is very similar to the Army War College in focus. Leadership and Ethics prepares Air War College students to lead in the strategic environment through the study and application of individual and organizational principles, practices, and ethics. Strategy and International Security produces senior officers who can assess competing strategies, evaluate today's complex, interdependent and dynamic international system, and articulate the role of air and space power in securing national security objectives. The Strategy, Doctrine and Airpower course examines classical military thought, the strategic choices made by the U.S. and other great powers during the twentieth and into the twenty-first century, and the coincident rise of airpower as a tool of national policy. The course on National Security and Decision Making analyzes alternative U.S. strategies for achieving national security in today's world, and the process by which such strategies are developed<sup>62</sup>

### **Navy**

The Naval War College (NWC) is the oldest war college and perceived as the most intellectual, the most conventionally academic of the institutions. Students are enrolled in four different resident schools: the College of Naval Warfare (CNW), for senior U.S. officers and some civilians; the College of Naval Command and Staff, for mid-grade U.S. officers and selected civilians; the Naval Command College (NCC), for international senior-grade officers of other nations with a curriculum almost identical to that of the CNW; and the Naval Staff College, for mid-grade international students learning the fundamentals of naval force planning, operations practice and doctrine.

Unlike the other service schools the more than 500 students attending the senior or intermediate level schools will not attend all classes together or even at the same time. Although the majority of U.S. Naval officers and officers from the other U.S. services and civilians in the class will begin their studies in August, nearly one-half of the Navy students and several of their classmates matriculate at the beginning of either the winter or spring trimesters of a given academic year.

Students pursue studies in each of the Naval War College's three core subject areas: Strategy and Policy, National Security Decision Making, and joint Military Operations.

The Strategy and Policy course features theorists familiar to the students at the other war colleges, such as Carl von Clausewitz, Sun Tzu, Alfred Thayer Mahan, Sir Julian Corbett, and Mao Tse-Tung. The focus is the "relationship between a nation's political ends and the way in which its military means are used in pursuit of those ends."<sup>63</sup> In the National Security Decision Making course, students are challenged with integrating the competing demands of determining future force structure.

Joint Military Operations is an in-depth study of the operational level of war and prepares students to excel through effective joint planning and force application in achieving appropriate military objectives. Although the NWC offers different electives on several regions and countries, it does not mandate a regional studies course like the other war colleges.

Since the same subjects are taught at both the senior and intermediate levels by the same departments, they are sequenced differently. During the first two trimesters, international students of the NCC join in lectures and in seminars with CNW students. Each student is also required to enroll in one Elective Program course of his or her choice per trimester. Grades are awarded in each of the core curriculum and elective courses and students are awarded a NWC Master of Arts degree in national security strategic studies or a NWC diploma, depending on their grades.<sup>64</sup>



The College of Naval Warfare and the Command and Staff College are seen as alternative to each other instead of sequential requirements; senior officers generally attend one but not both. Additionally, unlike the other service, attendance is not required for promotion to admiral. Advancing to the top in the Navy still depends on going to sea on a ship.<sup>65</sup>

### **Marines**

The newest and smallest war college belongs to the Marines. Founded in 1990 as a part of the Marine Corps University, the Marine Corps War College (MCWC) offers academic freedom in a highly disciplined environment to approximately 15 U.S. military and civilian senior-level students.

The format at the MCWC is somewhat similar to the Air War College in that the students function as a unit the entire academic year and the active learning model central to the program entails numerous field trips. During the War, Policy and Strategy course, students are focused on about critical analysis and judgment primarily at the strategic level of war. The course emphasizes the importance of tailoring national strategies in all types of conflicts to enemy and friendly strengths and weaknesses.

All students study each region in the Regional Studies course which takes a strategic look at the Middle East, Latin America, Europe, Africa, and the Pacific Rim focusing not just on security issues but on economics, politics and culture as well. Travel includes class trips and seminars with key personnel from the North Atlantic Treaty Organization, a number of the combatant commands, the Center for Strategic and International Studies, the Brookings Institute, the Center for Naval Analyses, and many more.

The War, Policy and Strategy course and the Regional Studies course complement the National Security and Joint Warfare course, designed to provide students with an in-depth understanding of both national security affairs and joint warfare. General Studies combines the remainder of the academic curriculum under one course director and includes an executive speaking course, lunchtime leadership series, leadership, independent research projects and contemporary issues.

While the MCWC does not provide a broad, general education like the other senior service schools, for the few that attend, it does encourage “intellectual risk-taking and critical thinking beyond that of its sister schools.”<sup>66</sup>

### **JOINT SERVICE SCHOOLS**

Most impacted by the education-related provisions of the GNA and subsequent panel recommendations were the “joint” schools of the National Defense University (NDU). NDU is

responsible for preparing selected officers and civilian officials from the DoD, Department of State (DOS), and other agencies of the Government for command, management, and staff responsibilities in a multinational, intergovernmental, and joint national security setting. The curricula of the two senior Colleges—the Industrial College of the Armed Forces and the National War College—emphasize the development and implementation of national security strategy and military strategy, mobilization, acquisition, management of resources, information and information technology for national security, and planning for joint and combined operations. The Joint Forces Staff College curriculum (formerly the Armed Forces Staff College; renamed as a result of the National Defense Authorization Act for FY 2001) prepares officers for joint and combined staff duty.<sup>67</sup>

The goal of NDU is to promote understanding and teamwork among the military forces and between those agencies of the U.S. Government and industry that contribute to national security. Although the students were not surveyed in the 1998 survey referred to earlier, anecdotal evidence indicates that the schools do not experience the same level of parochialism evidenced in the service schools.

### **National War College**

The National War College (NWC) gives far more attention to the federal government than the service schools. Detailed studies of the executive agencies and Congress inform the study of the political environment itself. The program is focused on broadening the students' understanding of national security policy and strategy, including national military strategy and operations. Reflecting the emphasis on the joint and interagency perspective, 75 percent of the student body is composed of equal representation from the land, sea services (Navy, Marine and Coast Guard), and air services, with the remaining 25 percent drawn from the Department of State and other federal departments and agencies. International fellows from a number of countries are an integral part of the student body. The seminar organization is used, but students do not spend the entire year with one core group, instead shuffling several times during the year as each core element is completed.

The NWC curriculum is composed of a core program, elective courses, and regional studies designed to provide a deeper, more comprehensive understanding of issues and areas of special concern in national security, military strategy and operations. The core curriculum focuses on the domestic and international contexts in which national security policy is developed, explores national security organizations and decision-making processes, and how all elements of national power are considered in the formulation and implementation of military

strategy. The aim is to help the NWC student understand that the policy and strategy process takes place in specific political, military, economic, social, geographical, and governmental contexts that have bilateral, regional, and global dimensions. An in-depth knowledge of the current and prospective foreign policy situation in nations and regions affected by U.S. policies is crucial to understanding how such strategic judgments are formulated. As a component of national security, military strategy and operations require the development within the Armed Forces of a joint culture that fosters the teamwork essential for deterrence, joint war fighting, and multinational endeavors. Planning and prosecution of joint campaigns and major operations require competency in joint skills, including the ability to orchestrate air, land, sea, space and special operations forces into effective joint teams.

The electives cover a range of subjects from military history, the influence of technology on warfare, proliferation and counter-proliferation, to the intelligence community, revolutionary warfare, and courses on American politics, statecraft, and various regions of the world. Unlike the other colleges, the regional studies last for the academic year, culminating in a two-week trip to the region studied, where the students meet with military and civilian officials in the region of their concentrated study to determine their perceptions of U.S. security policy. They also meet with representatives of the media, academia, trade, and commerce to gain a broader perspective on reactions to American policies in a variety of areas.<sup>68</sup>

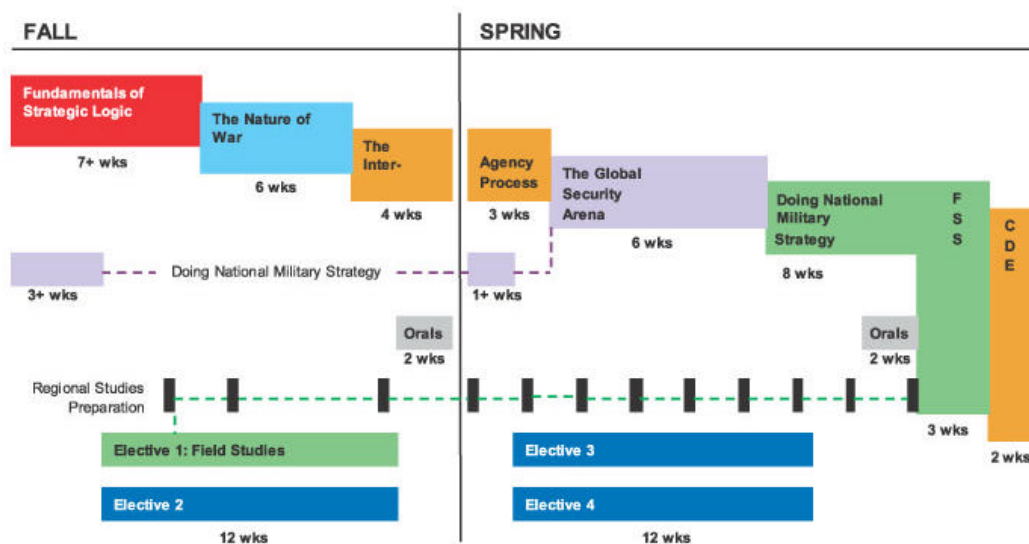


FIGURE 1. NWC CURRICULUM

## The Industrial College of the Armed Forces

The Industrial College of the Armed Forces' (ICAF) core curriculum, like the other war colleges, is focused on strategy, decisionmaking, and jointness. However, ICAF is the nation's only educational institution that emphasizes the management of national resources to support national security strategy. The executive-level courses and associated research focus on the civilian economy, in particular, defense-essential industries, and their capacity to support military operations. Special emphasis is given to materiel acquisition and joint logistics, and their integration into national security strategy for peace and war. Intrinsic to this is the internalization of a joint, interagency perspective and a broad education that places national security decisions in the context of historical, political, social, economic, informational and military trends. The joint/interagency perspective is reflected by the student body: 58 percent of students are military representatives from the land, sea, and air services; 32 percent are from the Departments of Defense and State and ten other federal agencies; eight percent are international officers; and two percent are from the private sector. Of the military about 30 percent come from an operations background while the remainder have management resources and technical backgrounds.<sup>69</sup>

1ST SEMESTER			2ND SEMESTER		
NATIONAL SECURITY STRATEGY			RESOURCING NATIONAL STRATEGY		
STRATEGIC LEADERSHIP	H O L I D A Y	E X E R C I S E	INFO SYS FOR LDERS		
POLITICAL SCIENCE &			REGIONAL SECURITY STUDIES		
ECONOMICS			ECONOMICS		
WAR STUDIES: MILITARY			STRATEGY & LOGISTICS		
VALUES, ETHICS, LEADERSHIP			VALUES, ETHICS, LEADERSHIP		
HISTORICAL STUDIES IN GRAND STRATEGY			MOBILIZATION		
			ACQUISITION		
			INDUSTRY STUDIES		
ELECTIVE/RESEARCH			ELECTIVE/RESEARCH		
ELECTIVE/RESEARCH			ELECTIVE/RESEARCH		

FIGURE 2. ICAF CURRICULUM

During the first semester, seminar groups study grand strategy and development of a national security strategy, with courses on military strategy, political science, strategic leadership, and economics. Students also survey all the major regions of the world and then

focus on one important to U.S. national security interests. The second half of the year's program builds upon this foundation by studying the resource component of national security strategy including the issues, players, policies, and processes in the public and private sectors and the linkages between the two. Courses in acquisition, logistics, mobilization, and information strategies facilitate understanding. During the spring semester, students travel extensively as they study in depth one of 20 industries critical to U.S. national security needs.<sup>70</sup>

### **The Joint Forces Staff College**

The Joint Forces Staff College educates staff officers and other leaders in joint operational-level planning and warfighting in order to instill a commitment to joint, multinational, and interagency teamwork, attitudes, and perspectives. Among the balanced mix of U.S. military students are a number of officers from several allied nations as well as representatives from U.S. Government agencies such as the Department of State and Defense Intelligence Agency. The curriculum is structured to develop understanding and appreciation of the various national, agency, and service interests and concerns that bear on the common defense and promote a spirit of cooperation and understanding that is critical to any joint or multinational endeavor. The Joint Forces Staff College serves as Phase II of a staff officer's education and builds on Phase I learning areas for joint PME taught at the service schools.<sup>71</sup>

### **RECOMMENDATIONS**

Immediate restructuring of the way military professionals are educated could help overcome parochialism in the short term, however long term changes call for a complete overhaul of the way the services orient members from initial accession and how members are developed until they reach senior levels.

#### **STAGE I**

The first stage would involve a change to the mix of students at each service's intermediate and senior-level PME Institution. Currently, the Skelton panel goals for host/non-host faculty/student mix at the service schools are not being met. For example, the panel recommended that fully 50 percent of the faculty of the host war college should be represented equally by the non-host departments. At the Army War College, that would mean 25 percent of the faculty would be from the Air Force and another 25 percent would be from the sea services. Except for the Naval War College, only 25 percent of the war colleges faculties are from the non-host service. The panel recommended a lesser percentage of non-host service faculty for

the intermediate service schools (15 percent from each non-host service), however, only 5 percent each for a combined 10 percent of faculty are from the non-host services.<sup>72</sup>

Additionally, the Skelton Panel goal of 3 students from each non-host military department per seminar is not being met for the service war colleges; the majority of officers at each Service school are from that particular service. Of the 268 U.S. officers in the U.S. Army War College class of 2003, there are 26 Air Force officers and 27 Sea Service officers (Navy/Marines/Coast Guard), the same number as in the larger 2001-2002 class and reflective of the CJCS but not the Congressional goal. The numbers are similar at the Air War College, with 25 of the 250 U.S. student slots designated for Army, and 26 for Navy/Marines. The Naval War College numbers are comparable with 55 Air Force and 58 Army officers joining the over 500 Naval officers and Marines to make up the class of 2003. The smaller Marine Corps War College comes closest to meeting the congressional goal; there are 7 Marines, 2 officers each from the Navy, Air Force and Army, 1 Coast Guard officer, and 1 civilian from the Department of State. The schools all use a small group or seminar format for the core courses and try to spread the service representatives equally; this may mean no more than one representative per non-host service, per seminar. Since the one student from a service in a seminar often has knowledge of only one part of his or her service, the Skelton panel believed a single student did not meet the goal even for Phase 1 JPME.<sup>73</sup>

Increasing the sister service representation at each of the schools could be easily implemented, and would address the concern originally raised by the Skelton panel and possibly improve the group dynamics in each seminar. One option would be to retain half of the U.S. seats at each of the service schools for that service. The other half would be evenly divided between the sister services. For example, in a typical U.S. Army War College seminar of 18, two seats would be reserved for the International students; eight seats for Army students and the remaining eight would be split between the Air Force and the Navy/Marines. Another option would be an even split between the three services. Increasing the percentages of sister service officers does a number of things. First, it prevents the domination that can ensue when one service has an overwhelming majority of the students, at least in a seminar setting and would also increase the variety of career fields from each service in each seminar. Also it is in keeping with the original recommendations of the Skeleton committee for a minimum of 3 non-host service members in each seminar. Anecdotal information from AY 2003 attendees at ICAF suggest that maintaining a more even mix of students significantly reduces parochialism and contributes to a more positive learning environment. Additionally, expanding the number of

officers exposed to members from other services can enhance the level of understanding of each service and increase the level of trust between the services,.

## STAGE II

Stage II involves the modification of the curriculum at the service schools to better meet joint learning objectives outlined in OPMEP. Although senior level subject matter is inherently joint, per CJCS Instruction 1800.01, the service schools focus on the host service's leaders, the host service's organization, and force structure and the host service's role in a joint operation, to the detriment of instruction about the other services.

In a modified curriculum, the Army, Air, Navy and Marine War College students would all study the same core courses on leadership, national strategy, the international security environment, joint operations, etc. A number of regional courses for each geographic region would be part of the elective offerings, with a requirement that students study at least one region. The flexibility of a number of classes would allow students to select a region based on their interest or projected assignment.

Key to the curriculum at both the intermediate and senior level would be the inclusion of a course of instruction on service culture. A better understanding of each service's culture and how culture impacts that service's vision of itself and warfare would go a long way in helping future operational and strategic leaders understand and influence behavior in the joint environment.

## STAGE III

Stage III takes the reorganization one step closer to true joint professional education by eliminating the concept of separate schools, particularly at the senior level. This is not a recommendation that the faculty and students of the senior level schools be combined at one location but rather, brought together under the existing NDU umbrella or a new organization and stripped of their service identities and institutional culture. Some have argued that service cultures are important to ensure the development of warriors completely competent in their combatant functions who can contribute to the conduct of joint operations.<sup>74</sup> At the senior service school level, however, attendees are at a stage in their careers where they have already mastered their particular dimension of war and should be ready to understand how to interact with the other participants in the national security environment.

There are two options for curriculum development at this stage. Each of the geographically separate schools could continue to teach the same curriculum or they could each be focused on a segment of the population. For example, in the first option, the students

at the War College, Carlisle Campus and the War College, Maxwell Campus would continue to study the previously modified courses on national strategy, the international security environment, joint operations, and service culture.

The second option is in keeping with career development concepts currently being implemented in the Air Force the Army. As previously mentioned, officers at the intermediate level in these two services have started development programs designed to ensure they have a breadth of exposure to their service mission as well as the depth of experience needed to be good in their jobs. After taking a common core course, selected officers participate in programs that develop their skills in their particular specialty. A similar construct at the senior level could provide further development opportunities for senior officers in their particular area of expertise. Instead of a one-size-fits-all course of study, each geographically separated school would specialize in courses that would allow a more in depth understanding of the responsibilities for a particular group of specialties. For example, the War College, Carlisle Campus would focus its study of national military and security strategy on helping support experts like engineers, logisticians or acquisition specialists develop the special skill sets they would be expected to have at the strategic level.

#### **ONGOING EFFORTS TO TRANSFORM DOD EDUCATION**

As the lead agent for joint force training, USJFCOM has a key role in the transformation of DoD training. QDR acknowledged the crucial role of training (defined as training, education, and job-performance aiding) and directed USJFCOM, along with the Under Secretary of Defense for Personnel and Readiness (USD[P&R]), USD (AT&L), the CJCS, and the Services to develop a plan for transforming DoD training.<sup>75</sup> The approved plan, a “Strategic Plan for Transforming DoD Training,” identified the establishment of a joint national training capability and the creation of methods to track the joint training, education and operational experience of personnel.”<sup>76</sup> The defense components responsible for training transformation (T2) are working to complete a T2 implementation plan that identifies responsibilities, timelines and metrics for meeting the goals set in the strategic plan.

Army and Air Force plans to expand the number of officers taking a common, core curriculum leadership course after selection to major, have the potential for fostering a joint perspective. Even if the number of non-host students per class does not increase, the increase in the number of in- residence opportunities with the traditional complement of sister service and international officers will provide increased opportunities for interaction.



## CONCLUSION

Recognizing that change is necessary doesn't make it any easier--that is especially true of a large bureaucracy like the DoD, which is comprised of many large bureaucracies, each with their own bureaucratic interests. The behaviors that stall significant organizational change such as "inwardly focused cultures, paralyzing bureaucracy, parochial politics, a low level of trust, lack of teamwork, arrogant attitudes, a lack of leadership in middle management, and the general human fear of the unknown" have already affected DoD's transformation effort and will continue to do so.<sup>77</sup> The Bush administration has adopted unprecedented policy changes in the two years since taking office despite significant internal resistance; the struggle over implementation of those policies promises to continue to be ferocious.<sup>78</sup>

The commitment to joint transformation expressed in each service's transformation plan, belies the fact that the services can't even agree on a definition of transformation, let alone how each will contribute to a transformed DoD.<sup>79</sup> Even before the April 2001 release of the independent Transformation Study Report commissioned by Secretary Rumsfeld as a precursor to the 2001 QDR, senior military officers were scrambling to protect their "rice bowls" while publicly venting about their lack of participation in the ongoing review process.<sup>80</sup> An ongoing Office of the Secretary of Defense (OSD) generated discussion about merging the separate Air Force and Navy unmanned combat aerial vehicles, which would ostensibly save money and create efficiencies through the sharing of technology, is encountering resistance from each service.<sup>81</sup> However, overcoming organizational resistance to get to joint decisions that utilize limited resources most effectively is the only way transformation will happen.

The DoD transformation activities and concepts being pursued by the Bush administration appear to reflect a commitment to the pursuit of transformation concepts that are truly joint. A reformed education system that exposes a greater number of officers from the different services to each other could create the atmosphere of trust and understanding that would convince the services to abandon their parochial interest for the good of the joint transformation effort.

WORD COUNT = 9,486

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<sup>33</sup> Hans Binnendijk and Richard Kugler, "Sound Vision, Unfinished Business: The Quadrennial Defense Review Report 2001," in Course 2, Vol IV: War, National Security Policy and Strategy (Carlisle Barracks, PA, 2002), 12.

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<sup>50</sup> Stiehm, 169.

<sup>51</sup> Simons, 206.

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